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10/684,968	10/14/2003	Dai Kamiya	9683/160	9952
Brinks Hofer G	7590 02/23/200 filson & Lione	7	EXAMINER	
NBC Tower, Suite 3600 P.O. Box 10395 Chicago, IL 60610		•	NGUYEN, KHOI	
		•	ART UNIT	PAPER NUMBER
		•	2132	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/684,968	KAMIYA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Khoi Nguyen	2132				
The MAILING DATE of this communication a Period for Reply		vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO tute, cause the application to become a	IICATION. a reply be timely filed DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 14	October 2003.					
2a) ☐ This action is FINAL . 2b) ☐ T	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice unde	er <i>Ex par</i> te Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims	•					
4) ☐ Claim(s) 1-6 is/are pending in the applicatio 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from cońsideration.					
Application Papers						
9)☐ The specification is objected to by the Exam						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to t						
Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the	•					
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bure * See the attached detailed Office action for a l	ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No. <u>2003-316635</u> . In received in this National Stage				
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)		Summary (PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/28/2004. 		o(s)/Mail Date f Informal Patent Application				

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DETAILED ACTION

1. Claims 1-6 are pending and considering for examination.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 2-3 and 5-6 are rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinct claim the subject matter which applicant regards as the invention.
- 4. With regard to claims 2 on line 3; claim 3 on lines 4 and 6; claim 5 on lines 5 and 7; and claim 6 on line 3, the phrase "said object" is not clearly understood whether it is referring to the perfect/imperfect encapsulated object or the generated object. For the purpose of examining, it will be treated as the generated object.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3 and 5 are rejected under 35 USC 103(a) as being unpatentable over ("Introduction to CORBA",

http://java.sun.com/developer/onlineTraining/corba/corba.html, December 3, 1999, Pages: 1-24), hereafter "Jguru" and in view of Lipkin et al. (US PGPub 2002/0120859), hereafter "Lipkin"

7. With regard to claim 1, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) comprising:

a program (Page 6, "The Stock Application" section, paragraph 1: line 1).

executing the program, in accordance with the program, using data which the program is permitted to use (Page 6, "The Stock Application" section, paragraph 2: line 2, stock symbols indicates only data relevant to stock; thus it reads on data that program is permitted to use).

specify data which is required to be used by the program (Page 6, "The Stock Application" section, paragraph 3: lines 1-3);

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selecting from either an imperfect encapsulated object or a perfect encapsulated object for the program (Page 14, "Providing an Implementation" section, paragraph 3: line 15, "return _Quote" indicates an imperfect encapsulated object), the imperfect encapsulated object being an object utilizing a method to provide data included in the object to a program which accesses the object, and the perfect encapsulated object being an object not utilizing the method;

selecting, in accordance with the selection made by the selecting means, either an imperfect encapsulated object or a perfect encapsulated object for the program (Page 14, "Providing an Implementation" section, paragraph 3: line 15, "return Quote" indicates an imperfect encapsulated object);

the generated object including the data specified by the specifying means (Pages 8-9, "Object References and Requests" section, paragraph 3: lines 23)

access control for the data specified by the specifying means (Page 6, "The Stock Applications" section, paragraph 3: lines 1-3) and for permitting the executing means (Page 6, "The Stock Applications" section, paragraph 2: line 2, stock symbols indicates only data relevant to stock; thus it reads on data that program is permitted to use) to access the data only via the object for the program by the object generating means (Pages 8-9, "Object References and Requests" section, paragraph 4: lines 4, theStock Object is getting value through

the factory interface after being created as an instance; thus it reads on access data only through the generated object)

However, Jguru does not disclose a storing means for storing data, an obtaining means using a method for accessing data, an executing means for executing the program, a specifying means for specifying among data stored in the storing means, a selecting means for selecting, an object generating means for generating either an imperfect encapsulated object or a perfect encapsulated object for said program, and an access control means for controlling access

On the other hand, Lipkin discloses a storing means for storing data (Fig. 1, Item 112-114 and 116-118; Fig. 2, Item 223; Fig. 3, Item 309);

an obtaining means ([0237]: line 1) using a method for accessing data (Fig. 1, Item 106, 110, and 115).

an executing means for executing the program (Fig. 2, Item 207; [0237]: line 1, executing a database stored procedure; line 3, inserting indicates executing means),

a specifying means for specifying among data stored ([0251]: lines 9-13, layout each field in a table for the select statement indicates specifying means among data stored) in the storing means,

a selecting means for selecting ([0277]: Items "Fetch", "Insert", "Update" and "Delete" indicates selecting means)

an object generating means for generating ([0280]: line 11, "new" indicates generating means)

an access control means for controlling access ([0367]: lines 11-14; [0391]: lines 1-7; [0447], Table 1).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Journ such that disclose a storing means for storing data, an obtaining means using a method for accessing data, an executing means for executing the program, a specifying means for specifying among data stored in the storing means, a selecting means for selecting, an object generating means for generating either an imperfect encapsulated object or a perfect encapsulated object for said program, and an access control means for controlling access, as taught by Lipkin to provide a computer security management system having a decentralized approach for

managing security that allows a global administrator to define complex privileges containing a set of (privilege, object) pairs that are domain dependent ([0012]: lines 5-8).

- 8. With regard to claim 2, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) wherein the program includes information indicating reliability of the program (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the stock report is displayed indicates reliability that includes in the program), and the selecting means selects the object on the basis of the information (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the fact that a particular stock report is displayed indicates the objected is selected based on the stock information list).
- 9. With regard to claim 3, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) wherein the program includes second information indicating reliability of the program (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the stock report is displayed indicates reliability that includes in the program) and the access control means determines whether the object is used by the executing means for accessing the data on the basis of the second information (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the fact that a particular stock report is displayed indicates the objected is selected based on the stock information list).

Jguru further discloses selects the object on the basis of the information (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the fact that a particular stock report is displayed indicates the objected is selected based on the stock information list).

However, Jguru does not disclose the program includes first information indicating a security level required for the data, and further, selecting means selects the object on the basis of the first information;

On the other hand, Lipkin discloses the program includes first information indicating a security level required for the data ([0447] Table 1 and 2), and the selecting means ([0277]: Items "Fetch", "Insert", "Update" and "Delete" indicates selecting means selects the object on the basis of the first information).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Jguru to incorporate information indicating a security level required for the data and the selecting means, as taught by Lipkin to provide a computer security management system having a decentralized approach for managing security that allows a global administrator to define complex privileges containing a set of (privilege, object) pairs that are domain dependent ([0012]: lines 5-8).

10. With regard to claim 5, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) wherein second information indicating reliability of the program (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the stock report is displayed indicates reliability that includes in the program) and the access control means determines whether the object is used by the executing means for accessing the data on the basis of the second information (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the fact that a particular stock report is displayed indicates the objected is selected based on the stock information list) and selects the object on the basis of the information (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the fact that a particular stock report is displayed indicates the objected is selected based on the stock information list).

However, Jguru does not disclose where the program includes first information indicating a security level required for the data, and the selecting means selects the object on the basis of the first information and the second information.

On the other hand, Lipkin discloses where the program includes first information indicating a security level required for the data, and the selecting means ([0277]: Items "Fetch", "Insert", "Update" and "Delete" indicates selecting means) and selects the object on the basis of the first information and the second information

([0251]: lines 8-12; id and time in the SQL statement indicates the first and the second information).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Jguru by incorporating the program includes first information indicating a security level required for the data, and the selecting means selects the object on the basis of the first information and the second information, as taught by Lipkin to provide a computer security management system having a decentralized approach for managing security that allows a global administrator to define complex privileges containing a set of (privilege, object) pairs that are domain dependent ([0012]: lines 5-8).

- 11. Claims 4 and 6 are rejected under 35 USC 103(a) as being unpatentable over Lipkin, in view of Jguru, and further in view of Underwood (US. Pat. No. 6704873), hereafter "Underwood".
- 12. With regard to claim 4, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) where both the imperfect encapsulated object program (Page 14, "Providing an Implementation" section, paragraph 3: line 15, "return _Quote" indicates an imperfect encapsulated object) and the perfect encapsulated object (Page 15, "Implementing a Server Using the Java 2 ORB"

section, paragraph 5: lines 21, "out.println" reads on perfect encapsulated object) are permitted to be used with the reliability of the program (Page 6, "The Stock Application" section, paragraph 3: lines 1-3, the stock report is displayed indicates reliability that includes in the program).

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However, Jguru does not disclose the execution means to be used in the case that reliability of the program is high, and only said perfect encapsulated object is permitted by the execution means to be used in the case that reliability of the program is medium, and neither the imperfect encapsulated object nor the perfect encapsulated object is permitted by the execution means to be used in the case that reliability of the program is low.

On the other hand, Lipkin discloses the execution means to be used (Fig. 2, Item 207; [0237]: line 1, executing a database stored procedure; line 3, inserting indicates executing means) in the case that reliability of the program is medium, and neither the imperfect encapsulated object nor the perfect encapsulated object is permitted by the execution means to be used in the case that reliability of the program is low (Fig. 9: item 905, the decision of the delivery service through the if indicator indicates object is permitted by the execution means).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Jguru by incorporating

5-8).

the execution means to be used in the case that reliability of the program is medium, and neither the imperfect encapsulated object nor the perfect encapsulated object is permitted by the execution means to be used in the case that reliability of the program is low, as taught by Lipkin to provide a computer security management system having a decentralized approach for managing security that allows a global administrator to define complex privileges containing a set of (privilege, object) pairs that are domain dependent (Lipkin, [0012]: lines

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However, neither Lipkin nor Jguru discloses the high, medium, and low level of reliability.

Underwood, however discloses the high, medium, and low level of reliability (col. 204: lines 55-57).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the methods of Jguru and Lipkin to incorporate high, medium, and low level, as taught by Underwood to increase the level of interaction between components in the system using web technology because it provides less complex, robust and faster interaction (Underwood, col. 1: lines 63-67; col. 2: lines 1-3).

13. With regard to claim 6, Jguru discloses a communication device (Page 2: Section "Users are distributed": line 1) where deleting the object generated by the generating means (Page 15, "Implementing a Server Using the Java 2 ORB" section, paragraph 5: lines 23, "out.close()" reads on termination of the object println where it was created initially when invoked; thus it reads on deleting the object generated by the generating means) at the time of terminating execution of the program.

However, Jguru does not further disclose a deleting means for deleting the object ([0241]: lines 24-27, Delete_spid indicates deletion means for an object) generated by the generating means at the time of terminating execution of the program.

On the other hand, Lipkin discloses a deleting means for deleting the object ([0241]: lines 24-27, Delete_spid indicates deletion means for an object) generated by the generating means at the time of terminating execution of the program.

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the method of Jguru by incorporating deleting method steps, as taught by Lipkin to provide a computer security management system having a decentralized approach for managing security that

allows a global administrator to define complex privileges containing a set of (privilege, object) pairs that are domain dependent (Lipkin, [0012]: lines 5-8).

However, neither Lipkin nor Jguru discloses deleting the object generated by the generating means the time of termination execution of the program.

Underwood, on the other hand discloses deleting the object generated by the generating means the time of termination execution of the program (col. 206: line 26).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention was made to modify the methods of Jguru and Lipkin to deleting the object generated by the generating means the time of termination execution of the program, as taught by Underwood to increase the level of interaction between components in the system using web technology because it provides less complex, robust and faster interaction (Underwood, col. 1: lines 63-67; col. 2: lines 1-3).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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a. US Pat. No. 6199046 to Heinzle et al. (Discloses real-time currency conversion through object oriented programming).

- US Pat. No. 6219787 to Brewer (Discloses wireless data platform couple with a dynamic cross compiler, linker for executing native code to be downloaded).
- c. US Pat. No. 7093298 to Rodriquez et al. (Discloses method for securing object enhancement and management of encapsulated objects and its attributes and define ways for objects to perform security on itself).
- d. US Pat. No. 6871277 to Keronen (Discloses method to prevent disclosure of protected information between end points where each end points is trusted or untrusted).
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoi Nguyen whose telephone number is 570-270-1251. The examiner can normally be reached on Mon-Fri (8:30 am 5:00 pm est)

 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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